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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,216	06/24/2004	Yuichi Hikichi	61534 (46342)	3278

21874 7590 06/27/2006

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EXAMINER

MEAH, MOHAMMAD Y

ART UNIT	PAPER NUMBER
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1652

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/500,216

Applicant(s)

HIKICHI ET AL.

Examiner

Mohammad Meah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12,19 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12,19 and 23-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Applicant, on date 4/7/2006 in response to the rejection of the previously elected claims 12 and 19 after examination, withdrew the claims 1-11, 13-18 and 20-22, amended the claims 12 and 19 and added new claims 23-27.

Priority

Acknowledgement is made of applicant's PCT priority date based on application filing date of 12/27/2002 in Japan # PCT/JP02/13640.

Claim Rejections

35 U.S.C 112

Claims 12 and 19 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant amended the claims 12 and 19 and added new claims 23-27.

Applicant's arguments, filed 4/10/06, with respect to 112 rejections of the amended claims 12 and 19 and new claims 23-27 have been fully considered and are persuasive. The 112 rejections of previous claims 12 and 19 became moot because of the amendment of the claims.

CLAIM Rejection - 35 U.S.C 102

The 102 rejections of previous claims 12 and 19 of the previous office action became moot because of applicants amendment of the claims.

CLAIM Rejection - 35 U.S.C 103a

Because of amendment of the claims 12 and 19 and addition of the new claims 23-27 by applicants new ground(s) of rejection as presented bellow:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12, 19 and 23, 25-26 are rejected under 35 U.S.C. 103(a) by Jenuwein et al. (US PAT 6555329 B2 in view of Jenuwein et al. (US PAT 6689583).

Jenuwein et al. (US PAT 6555329 B2) teaches methods of screening modulators of histone methyl transferase comprising amino acid sequence of SEQ ID NO: 7 (56% identical to SEQ ID NO: 1), and suggested them as therapeutic agent for cancer and apoptosis inducer.

Jenuwein et al. (US PAT 6689583). teach a histone methyltransferase protein of SEQ ID NO: 4 which has 100% sequence identity with the SEQ ID NO: 1 of the present application. Jenuwein et al. (US PAT 6689583). used radio-labeled methyl

group of S-adenosyl-L-methionine to measure the said methyl group transfer to N-terminal lysine residue (lysine 9 of H3 N-terminus) of histone polypeptide (page 6 lines 30-60).

As such it would have been obvious to one of ordinary skill in the art to use Jenuwein et al's (US PAT 6689583) histone methyltransferase protein of SEQ ID NO: 4 (which has 100% sequence identity with the SEQ ID NO: 1 of the present application) and Jenuwein et al's (US PAT 6689583) assay method comprising radio-labeled methyl group of S-adenosyl-L-methionine in measuring the methyl transfer to N-terminal lysine residue (lysine 9 of H3 N-terminus) of histone methyltransferase polypeptide and use the said histone methyltransferase polypeptide and assay method comprising radio-labeled methyl group of S-adenosyl-L-methionine to measure the methyl transfer to N-terminal lysine residue to screen modulators of histone methyl transferase as therapeutic agent for cancer and apoptosis inducer as taught by Jenuwein et al. (US PAT 6555329 B2).

Claims 24-25 and 27 are rejected under 35 U.S.C. 103(a) by Kouzarides et al. (WO 02/090578) in view of Jenuwein et al. (US PAT 6689583).

Kouzarides et al. teaches methods of screening modulators of histone methyl transferase by measuring the methylated and unmethylated histone polypeptide reacted with s-adenosyl-L-methionine in presence of test compound using MALDI

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Mass spectrometry and suggested them as therapeutic agent for cancer and apoptosis inducer.

Jenuwein et al. (US PAT 6689583). teach a histone methyltransferase protein of SEQ ID NO: 4 which has 100% sequence identity with the SEQ ID NO: 1 of the present application.

As such it would have been obvious to one of ordinary skill in the art to use Jenuwein et al's (US PAT 6689583) histone methyltransferase protein of SEQ ID NO: 4 (which has 100% sequence identity with the SEQ ID NO: 1 of the present application) and use MALDI Mass spectrometry as taught by Kouzarides et al. to screen modulators of said histone methyl transferase.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Meah whose telephone number is 571-272-1261. The examiner can normally be reached on 8:30-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 571-272-0928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

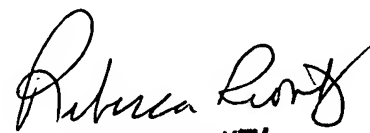
Mohammad Younus Meah, PhD

Examiner, Art Unit 1652

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